

FIGURE 1

[illegible]

[illegible][illegible]

FIGURE 4

tccacacaga	gcccacccgt	cttcccccttg	acccgctgct	gcaaaaaacat	tccctccaat	60
gccacctccg	tgaactctggg	ctgcctggcc	acgggctact	tcccggagcc	ggtgatggtg	120
acctgggaca	caggctccct	caacgggaca	actatgacct	taccagccac	caccctcacg	180
ctctctggtc	actatgccac	catcagcttg	ctgaccgtct	cgggtgcgtg	ggccaagcag	240
atgttcacct	gccgtgtggc	acacactcca	togtccacag	actgggtcga	caacaaaacc	300
ttcagcgtct	gtccagggg	cttcaccccg	cccaccgtga	agatcttaca	gtcgtcctgc	360
gacggcgggc	ggcacttccc	cccgaccatc	cagctcctgt	gcctcgtctc	tgggtacacc	420
ccagggacta	tcaacatcac	ctggctggag	gacgggcagg	tcatggacgt	ggacttgtcc	480
accgcctcta	ccacgcagga	gggtgagctg	gcctccacac	aaagcgagct	caccctcagc	540
cagaagcact	ggctgtcaga	ccgcacctac	acctgccagg	tcacctatca	aggtcacacc	600
tttgaggaca	gcaccaagaa	gtgtgcagat	tccaacccga	gaggggtgag	cgcctaccta	660
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gtggacctgg	cacccagcaa	ggggaccgtg	aacctgacct	ggteccgggc	cagtgggaag	780
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gtgtctgtaa	atcccggtaa	atgacgtact	cctgcctccc	tccctcccag	ggctccatcc	1320
agctgtgcag	tggggaggac	tggccagacc	ttctgtccac	tgttgcaatg	accccaggaa	1380
gctaccccca	ataaaactgtg	cctgctcaga	gccccagtac	acccattctt	gggagcgggc	1440
agggc						1445

FIGURE 5

Ser Thr Gln Ser Pro Ser Val Phe Pro Leu Thr Arg Cys Cys Lys Asn
 Ile Pro Ser Asn Ala Thr Ser Val Thr Leu Gly Cys Leu Ala Thr Gly
 Tyr Phe Pro Glu Pro Val Met Val Thr Trp Asp Thr Gly Ser Leu Asn
 Gly Thr Thr Met Thr Leu Pro Ala Thr Thr Leu Thr Leu Ser Gly His
 Tyr Ala Thr Ile Ser Leu Leu Thr Val Ser Gly Ala Trp Ala Lys Gln
 Met Phe Thr Cys Arg Val Ala His Thr Pro Ser Ser Thr Asp Trp Val
 Asp Asn Lys Thr Phe Ser Val Cys Ser Arg Asp Phe Thr Pro Pro Thr
 Val Lys Ile Leu Gln Ser Ser Cys Asp Gly Gly Gly His Phe Pro Pro
 Thr Ile Gln Leu Leu Cys Leu Val Ser Gly Tyr Thr Pro Gly Thr Ile
 Asn Ile Thr Trp Leu Glu Asp Gly Gln Val Met Asp Val Asp Leu Ser
 Thr Ala Ser Thr Thr Gln Glu Gly Glu Leu Ala Ser Thr Gln Ser Glu
 Leu Thr Leu Ser Gln Lys His Trp Leu Ser Asp Arg Thr Tyr Thr Cys
 Gln Val Thr Tyr Gln Gly His Thr Phe Glu Asp Ser Thr Lys Lys Cys
 Ala Asp Ser Asn Pro Arg Gly Val Ser Ala Tyr Leu Ser Arg Pro Ser
 Pro Phe Asp Leu Phe Ile Arg Lys Ser Pro Thr Ile Thr Cys Leu Val
 Val Asp Leu Ala Pro Ser Lys Gly Thr Val Asn Leu Thr Trp Ser Arg
 Ala Ser Gly Lys Pro Val Asn His Ser Thr Arg Lys Glu Glu Lys Gln
 Arg Asn Gly Thr Leu Thr Val Thr Ser Thr Leu Pro Val Gly Thr Arg
 Asp Trp Ile Glu Gly Glu Thr Tyr Gln Cys Arg Val Thr His Pro His
 Leu Pro Arg Ala Leu Met Arg Ser Thr Thr Lys Thr Ser Gly Pro Arg
 Ala Ala Pro Glu Val Tyr Ala Phe Ala Thr Pro Glu Trp Pro Gly Ser
 Arg Asp Lys Arg Thr Leu Ala Cys Leu Ile Gln Asn Phe Met Pro Glu
 Asp Ile Ser Val Gln Trp Leu His Asn Glu Val Gln Leu Pro Asp Ala
 Arg His Ser Thr Thr Gln Pro Arg Lys Thr Lys Gly Ser Gly Phe Phe
 Val Phe Ser Arg Leu Glu Val Thr Arg Ala Glu Trp Glu Gln Lys Asp
 Glu Phe Ile Cys Arg Ala Val His Glu Ala Ala Ser Pro Ser Gln Thr
 Val Gln Arg Ala Val Ser Val Asn Pro Gly Lys

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FIGURE 7

Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
 Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
 Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
 Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
 Asp Gly Val Glu Val His Asn Val Lys Thr Lys Pro Arg Glu Glu Gln
 Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
 Asn Trp Met Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
 Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Val Gln Pro
 Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr
 Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
 Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
 Lys Thr Thr Pro Pro Val Leu Asp Ser Val Gly Ser Phe Phe Leu Tyr
 Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
 Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Gln Gln Arg
 Ser Leu Ser Leu Ser Pro Gly Lys Val Glu Gly Gly Gly Gly Ser Gly
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Phe Thr Pro Pro Thr Val Lys
 Ile Leu Gln Ser Ser Cys Asp Gly Gly Gly His Phe Pro Pro Thr Ile
 Gln Leu Leu Cys Leu Val Ser Gly Tyr Thr Pro Gly Thr Ile Asn Ile
 Thr Trp Leu Glu Asp Gly Gln Val Met Asp Val Asp Leu Ser Thr Ala
 Ser Thr Thr Gln Glu Gly Glu Leu Ala Ser Thr Gln Ser Glu Leu Thr
 Leu Ser Gln Lys His Trp Leu Ser Asp Arg Thr Tyr Thr Cys Gln Val
 Thr Tyr Gln Gly His Thr Phe Glu Asp Ser Thr Lys Lys Cys Ala Asp
 Ser Asn Pro Arg Gly Val Ser Ala Tyr Leu Ser Arg Pro Ser Pro Phe
 Asp Leu Phe Ile Arg Lys Ser Pro Thr Ile Thr Cys Leu Val Val Asp
 Leu Ala Pro Ser Lys Gly Thr Val Asn Leu Thr Trp Ser Arg Ala Ser
 Gly Lys Pro Val Asn His Ser Thr Arg Lys Glu Glu Lys Gln Arg Asn
 Gly Thr Leu Thr Val Thr Ser Thr Leu Pro Val Gly Thr Arg Asp Trp
 Ile Glu Gly Glu Thr Tyr Gln Cys Arg Val Thr His Pro His Leu Pro
 Arg Ala Leu Met Arg Ser Thr Thr Lys Thr Ser Gly Pro Arg Ala Ala
 Pro Glu Val Tyr Ala Phe Ala Thr Pro Glu Trp Pro Gly Ser Arg Asp
 Lys Arg Thr Leu Ala Cys Leu Ile Gln Asn Phe Met Pro Glu Asp Ile
 Ser Val Gln Trp Leu His Asn Glu Val Gln Leu Pro Asp Ala Arg His
 Ser Thr Thr Gln Pro Arg Lys Thr Lys Gly Ser Gly Phe Phe Val Phe
 Ser Arg Leu Glu Val Thr Arg Ala Glu Trp Glu Gln Lys Asp Glu Phe
 Ile Cys Arg Ala Val His Glu Ala Ala Ser Pro Ser Gln Thr Val Gln
 Arg Ala Val Ser Val Asn Pro Gly Lys

Dose-dependent inhibition of basophil histamine release using the fusion protein GE2 (\pm SEM; n=3 separate donors, each in duplicate)

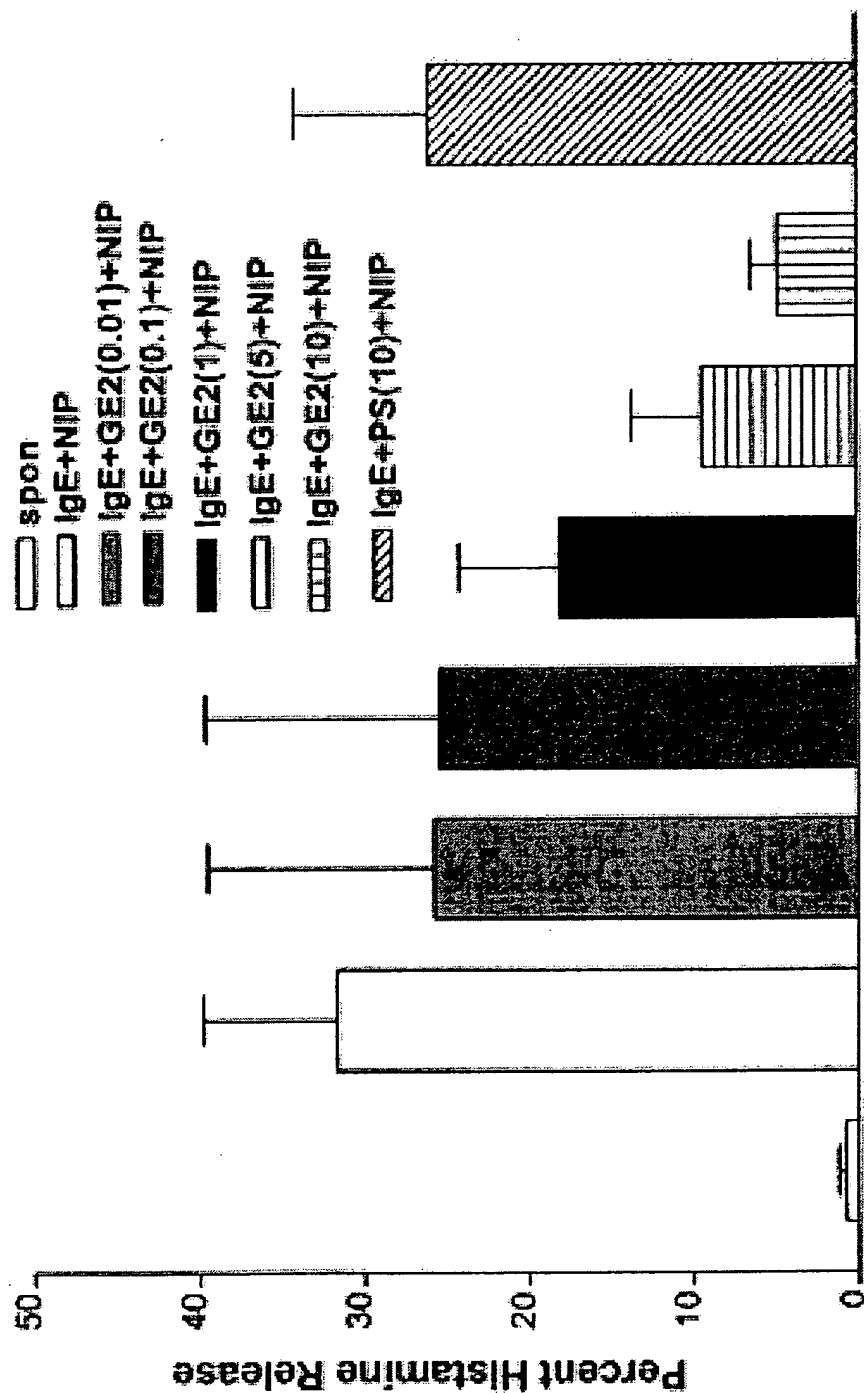
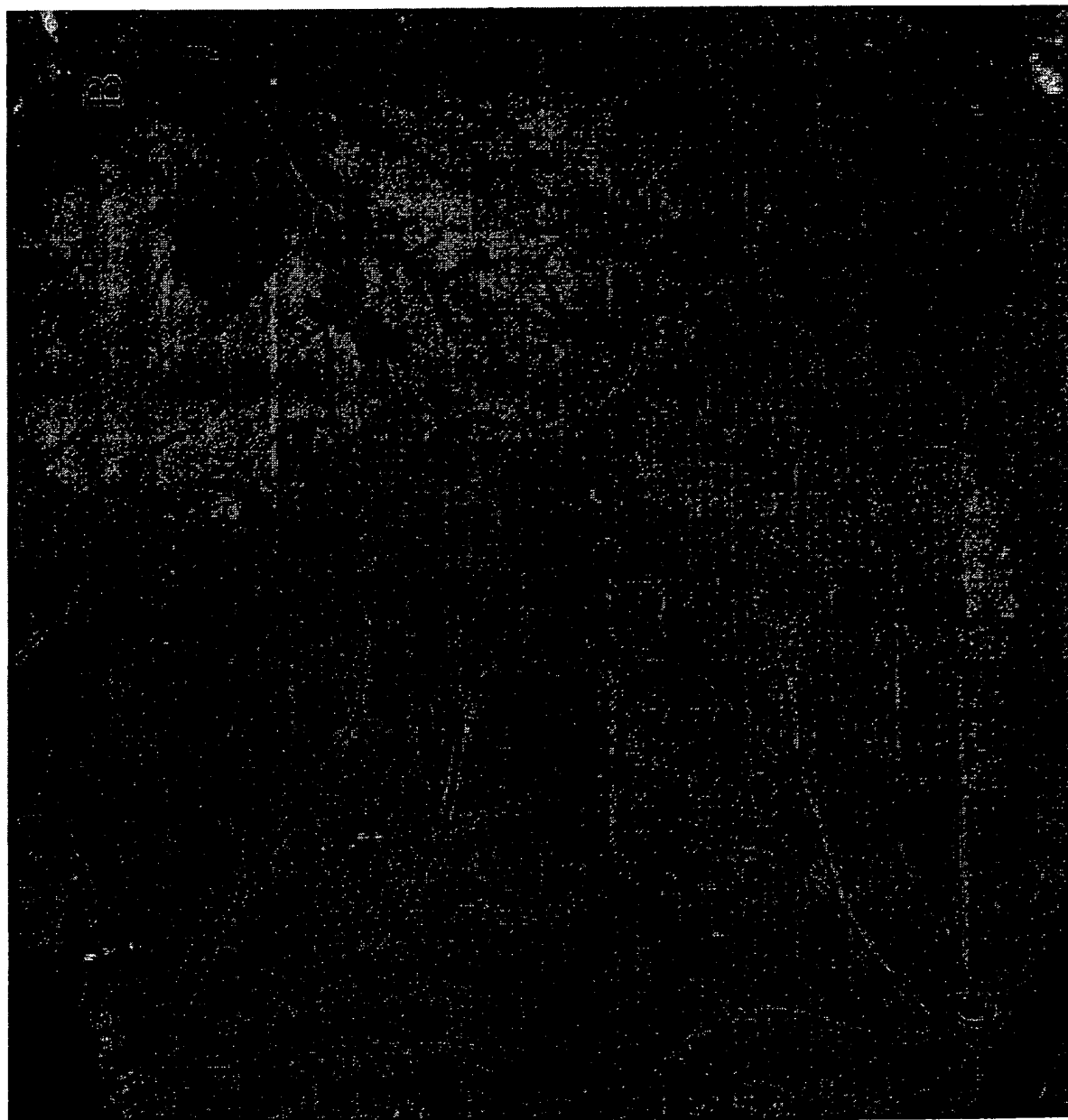


FIGURE 8

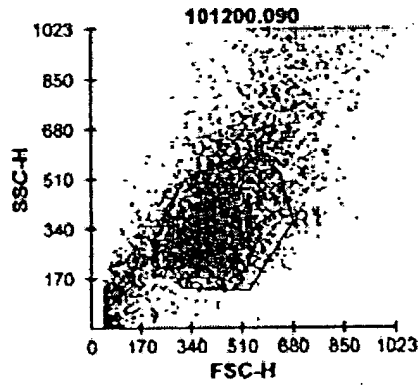


A: 250ng human IgE-anti NP	B: saline
C: 250ng human IgE-anti NP+250ng GE2	D: 250ng human IgE-anti NP+250ng PS IgE

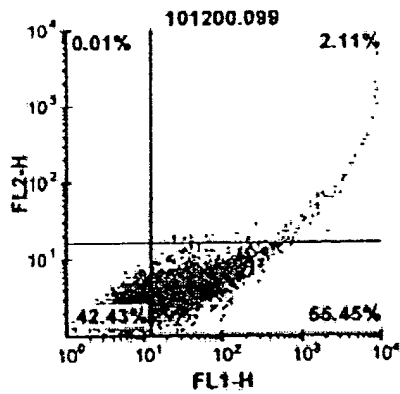
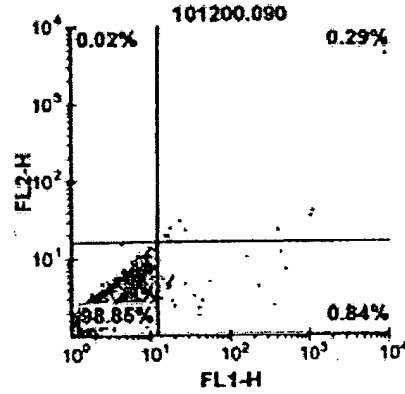
FIGURE 10

GE2 binding to HMC-1 cells that express FcGR1b but not FcER1a

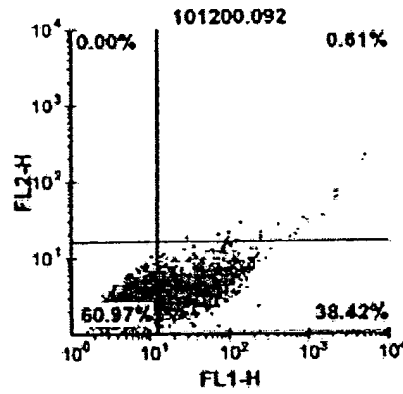
A. Cell gating



B. Control staining with goat anti-human IgG



C. human IgG followed by staining with goat anti-human IgG

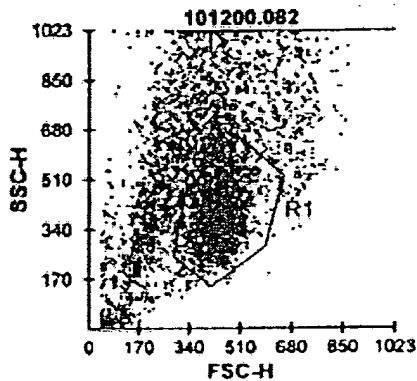


C. GE2 protein followed by staining with goat anti-human IgG

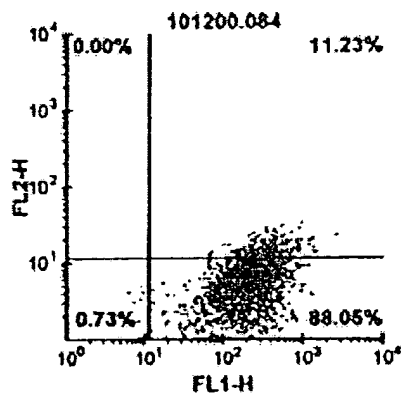
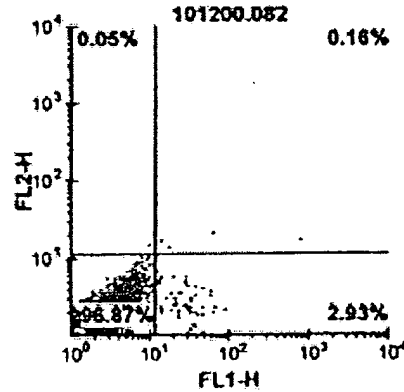
FIGURE 11

GE2 binding to 3D10 cells that express FcεRIa but not FcγRIIb

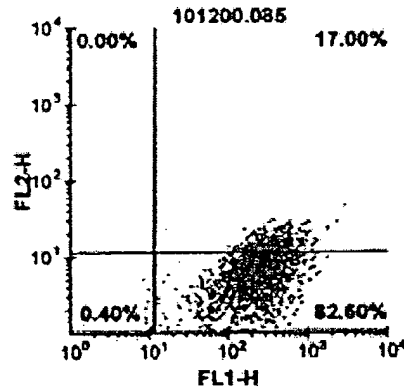
A. Cell gating on 3D10 cells which express FcεRIa but not EcGR-



B. Staining with goat anti-human IgE alone



C. human IgE myeloma followed by staining with goat anti-human IgE



D. GE2 followed by staining with goat anti-human IgE